

Application Ser. No.: 10/537,632
Title: AN APPARTUS FOR DETECTING ANIMALS
Response to Office Action dated: February 2, 2010

Remarks

Claims 1, 4-6, 9, 10 and 13-16 remain in this application. Claims 1 and 14 have been amended. No claims presently stand allowed.

Claim 14 was rejected as being dependent upon a cancelled claim. Applicant has amended claim 14 to now be dependent from claim 1.

In the Office Action of 2 February 2010, the examiner asserted that the sensor limitation of claim 1, in regard to the recitation of “below a predetermined value”, is broad enough to encompass no animal present, rendering the Pratt device as inherently meeting the claim. Applicant respectfully submits that such a reading is inconsistent with the prior language in the claim and is not a reasonable interpretation of the meaning “below a predetermined value.” The attention of the examiner is invited to the language which indicates that sensor device includes a first sensor is arranged to sense the presence of the animal at a first point of the passage, and that the sensor device includes a second sensor arranged to sense the presence of the animal at a second point in the passage. Further, the sensor device is arranged to produce a signal when the width of the animal is less than a predetermined value at the determined position. Thus, it is inconsistent and unreasonable to interpret that the width of the animal means that there is no animal present. For the animal to have a width and be sensed, it must be present and detectible. However, to render moot such an interpretation, claim 1 has been amended to indicate that the signal is produced when an animal is present but when the width of the animal is below a predetermined level. Thus, the signal must correspond to a part of a sensed animal which is below a predetermined level, and not merely “no animal present.”

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In the Office Action, it appears that US Patent No. 5,673,647 to Pratt is being interpreted as disclosing the feature that the first point (first sensor) and the second point (second sensor) are both located at a determined position with regard to the transport direction but spaced apart from each other with a distance” from the language appearing at page 4 of the Office Action.

However, the spacing of the first sensor of the present invention is located at a predetermined position spaced from the second sensor by a transverse dimension – this transverse dimension being a distance larger than the width of the head of an animal to be measured, but smaller than the width of a body part of the animal to be guided through the passage.

In contrast, the Pratt ‘647 patent, in Fig. 11A, discloses three sensors located after each other in the direction of travel without regard to any transverse dimension. That is to say, the three sensors are positioned successively after each other in the transport direction of the animal. Applicant wishes to point out that a significant aspect of the present invention is to produce a signal when the width of an animal comes below a predetermined value, because then it is possible to identify the beginning and end of the body part of the animal, and thus to have a proper identification of a specific animal. To this end, applicant has amended claim 1 to specifically recite that the first point and the second point are *located* at a predetermined position with regard to the transport direction, but *spaced apart* a distance with regard to a direction transverse to the transport direction. This provides a significant advantage in that it is then possible to separate animals from each other in a train of animals passing through the animal passage by identifying the animals with regard to the direction transverse to the direction of travel.

The examiner’s attention is further invited to the Pratt disclosure, wherein three sensors 310, 312 and 314 are shown in block 34 of Fig. 9A. These appear to be only on/off sensors, which indicate presence. See Pratt ‘647, col. 33, lines 48-63.

Video equipment for measuring certain external dimensions of each animal is located in the following box 36. See Pratt ‘647, col. 10, line 66 to column 11, line 6. In the next box 38, equipment for weighing the animal is provided. Equipment for electronic identification (EID) by means of a so-called “ear tag” affixed to the ear of the animal is also provided.

Equipment for measuring the backfat content of the animal is found in the following box, box 40. This is identified in the application as ultrasound equipment. See Pratt '647, col. 11, lines 34-38. This box also has three sensors – 384, 386 and 388, which also appear to be sensors of the on/off type. See Pratt '647, column 34, line 65 to column 35, line 13. The next box, box 42, is a treatment station which also has three sensors 428, 430 and 432, which though not disclosed are presumably of the same type of sensor as previously disclosed.

From the description of Pratt '647 as discussed herein, it can be thus concluded that all of the sensors in the various boxes are provided successively after each other along the transport direction. This disclosure is clearly at odds with and different that the location of the sensors in the present invention. The purpose of the sensors as used by Pratt '647 are to establish where different parts of the animal are located in the box in question. The identification of whether an animal is present or not is made by means of so-called tags and EID. Furthermore, it can be concluded that none of the sensors disclosed is used for establishing the width of the animal. Instead, video equipment is used in box 36 for measuring dimensions, and in box 38 there is a scale for weighing the animal. Because Pratt captures individual animals in the boxes (see, e.g., col. 33, lines 5 through 20), only opening and closing the head gate to admit one animal, Pratt is structurally quite different than the present invention because that invention is not designed to deal with the problem of counting or segregating animals in a “cow train,” which is possible and indeed a goal of the present invention.

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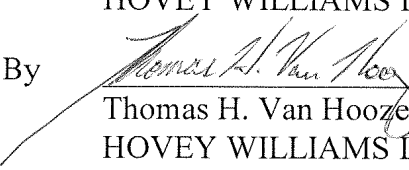
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Applicant earnestly solicits entry of this amendment and submits that the amendment places this application in condition for allowance. Should the examiner have any issues which may be resolved by a telephone conference, they may be addressed to the undersigned at 1-800-445-3460. Any additional fees necessitated by this submission may be charged to Deposit Account 19-0522.

Respectfully submitted,

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